
ZDHC Dissolved Pulp Guidelines V1.0 Industry Standard Implementation Approach

Version 1.0
October 2024



Introduction

ZDHC has developed the Dissolved Pulp Guidelines V1.0 to enhance the transparency of responsible production in the entire man-made cellulosic fibres (MMCF) supply chain, from wood sourcing to (MMCF) production. The guidelines is an initiative by ZDHC to address the use and discharge of chemicals in wood-based dissolved pulp manufacturing. These guidelines include chemical recovery, wastewater and air emissions requirements for wood-based dissolved pulp facilities. Clean input and efficient process management are essential in dissolved pulp manufacturing to ensure high-quality output and minimise environmental impact.

The ZDHC Dissolved Pulp Guidelines V1.0 apply to wood-based dissolved pulp production, including key processes such as pulping (Kraft (sulphate) and/or Sulphite), oxygen delignification and bleaching methods, both total chlorine-free (TCF) and elemental chlorine-free (ECF).

ZDHC has created this document to underline the steps and actions necessary to implement the ZDHC Dissolved Pulp Guidelines V1.0 and support the stakeholders involved. With the release of these guidelines, all relevant stakeholders are expected to collaborate towards a successful industry implementation.

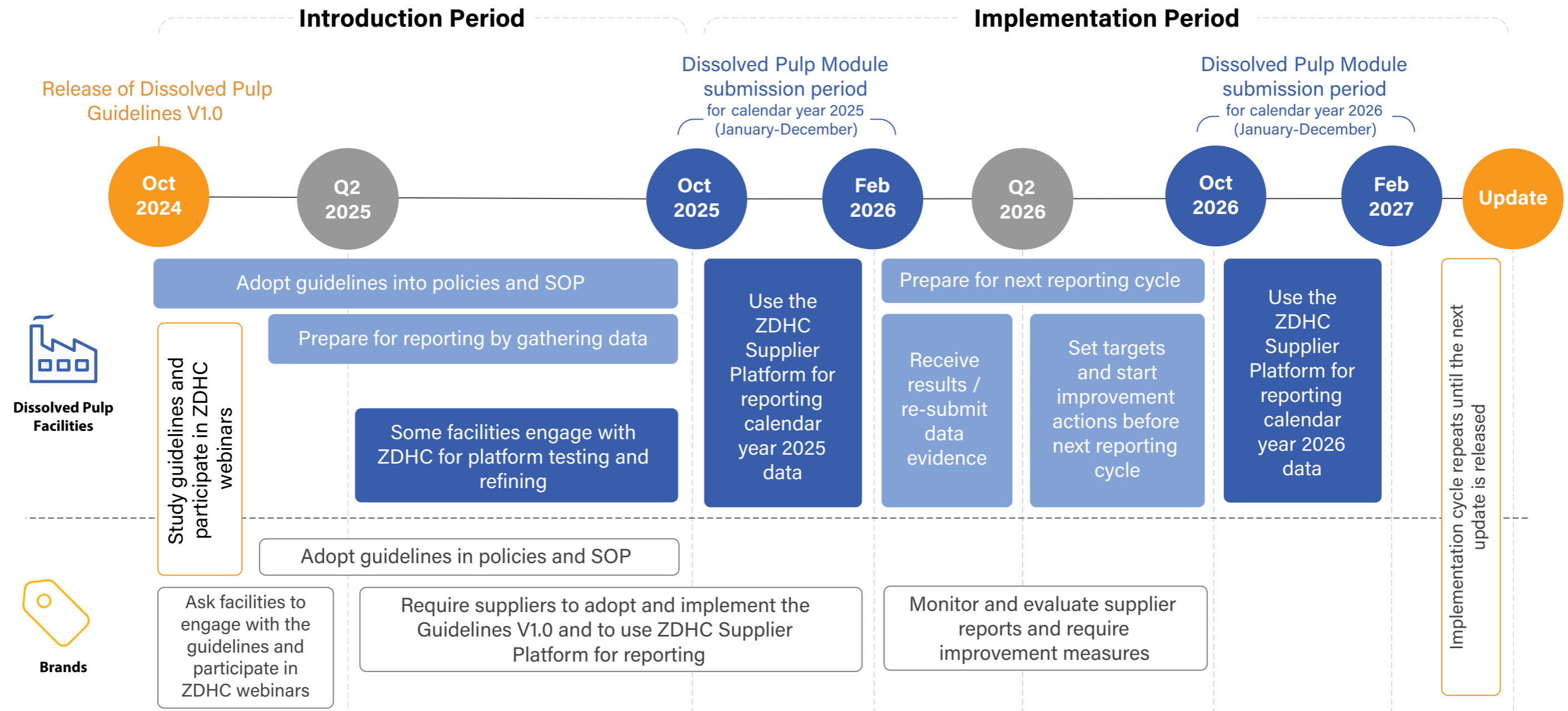
The key stakeholder groups identified by ZDHC to implement these guidelines are:

- 1) Dissolved pulp manufacturing facilities and suppliers, hereafter referred to as dissolved pulp facilities.

And the key stakeholder group identified by ZDHC to engage with the implementation of these guidelines are:

- 1) Man-made cellulosic fibres (MMCF) suppliers
- 2) Brands and retailers
- 3) ZDHC Approved Wastewater Laboratories

Industry Standard Implementation Approach – Overview



2.0 Introduction Period

The introduction period will run from October 2024 to October 2025. During this time, the ZDHC Dissolved Pulp Guidelines V1.0 will be introduced to the industry through webinars aimed at raising awareness and informing key stakeholders in preparation for the implementation period. It is recommended that all relevant supply chain actors ensure responsible staff participate in these webinars.

Throughout the introduction period, stakeholders are expected to update their policy statements, such as chemical management policies and communicate these updates to both internal and external stakeholders, referencing the ZDHC Dissolved Pulp Guidelines V1.0 to set clear expectations.

Brands and retailers, as well as MMCF suppliers should communicate the adoption of the ZDHC Dissolved Pulp Guidelines V1.0 to their supply chain by establishing clear requirements related to the guidelines. And request suppliers to begin preparing for reporting to the ZDHC Supplier Platform Dissolved Pulp Module starting in October 2025.

Dissolved pulp facilities should prepare for reporting to the ZDHC Supplier Platform via the Dissolved Pulp Module from October 2025.

New solution providers are encouraged to seek approval from ZDHC to facilitate testing logistics during the implementation period.

3.0 Implementation Period

The implementation period starts with the first reporting cycle for the ZDHC Dissolved Pulp Guidelines V1.0, which begins on 1st October 2025 and ends on 14th February 2026. The general implementation period will continue with yearly assessment cycles until the publication of the next update of these guidelines. During this period, concrete steps must be taken by the supply chain stakeholders to put adoption measures into practice. These may include training, testing and tracking results, among other possible actions.

Brands and retailers, as well as MMCF suppliers should engage with the dissolved pulp facilities in their supply chain to:

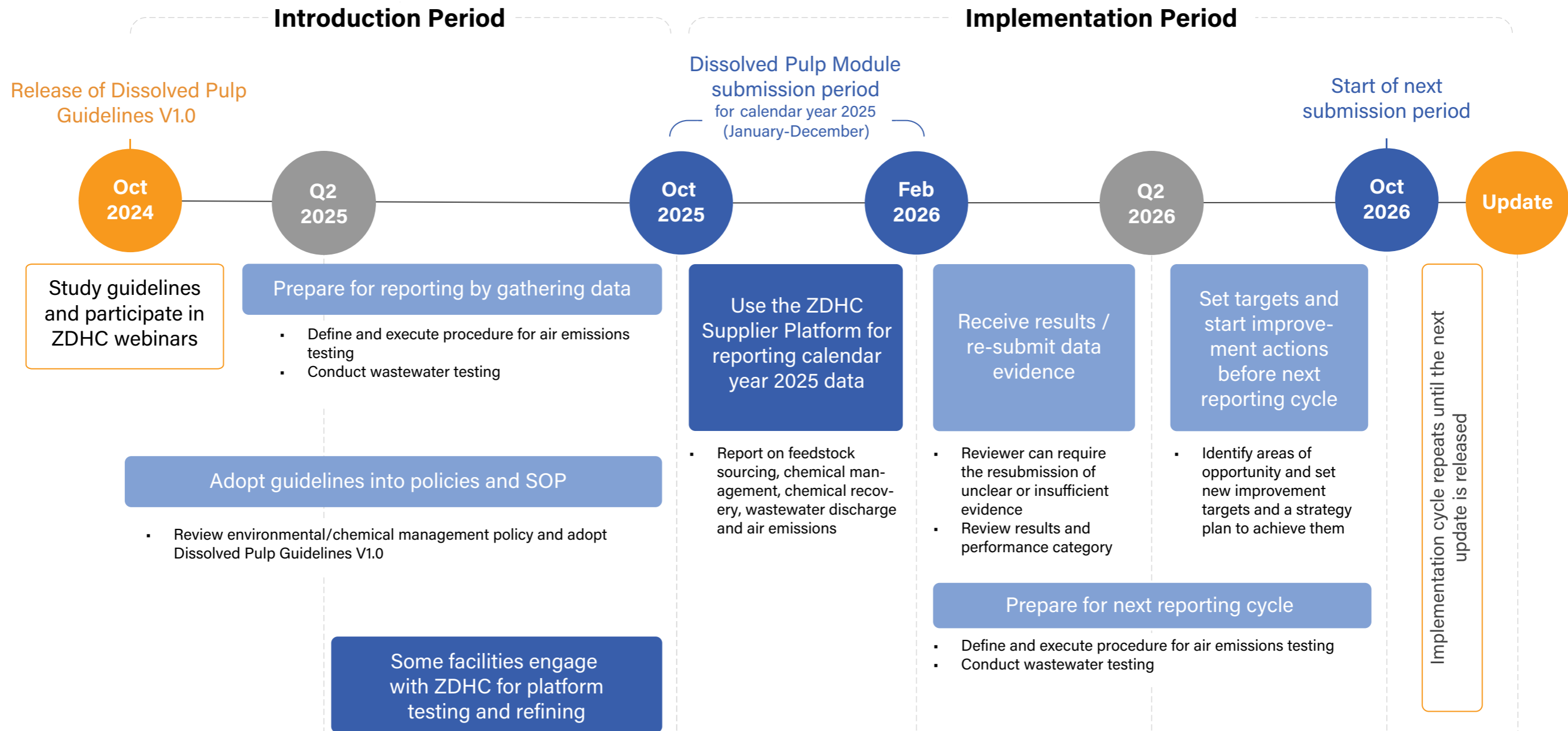
- Ensure the outlined requirements are being met.
- Assure improvement measures are being taken.
- Conduct monitoring and evaluation activities by the end of 2026.

→ Open dialogue with suppliers is encouraged to better understand the reported data, identify opportunities for improvement and work on an informed improvement roadmap.

Dissolved pulp facilities are expected to report to the ZDHC Supplier Platform Dissolved Pulp Module between 1st October 2025 and 14th February 2026. The data collected during this period will inform opportunities for improvement.

→ By the end of the respective submission year, suppliers should have established or revised their improvement goals and repeat this process annually.

Industry Standard Implementation Approach – Suppliers



Summary of requirements in Dissolved Pulp Guidelines V1.0

Scope	Requirements	Implementation Approach
Input Management		
Kraft/Sulphite processes	<ul style="list-style-type: none"> Use certified feedstock such as FSC, PEFC, or Canopy certified wood. Use Blockchain-based traceability or traceability tools for input feedstock. Keep records of chemical consumption per air-dry tonne of pulp. 	Upload comprehensive records onto the ZDHC Supplier Platform for the calendar year (from 1 st January to 31 st December).
Process Management		
Kraft/Sulphite processes	Keep record of chemical recovery <ul style="list-style-type: none"> S & Na recovery in Kraft Process S & Mg recovery in MgO-based Sulphite Process S & Na recovery NaOH-based Sulphite Process 	Upload comprehensive records onto the ZDHC Supplier Platform for the calendar year (from 1 st January to 31 st December).
Output Management		
Kraft/Sulphite processes	Wastewater and sludge <ul style="list-style-type: none"> Test wastewater for conventional, heavy metals and MRSL parameters through ZDHC Approved Wastewater Testing Laboratories twice a year (April and October cycles). Report load-based wastewater parameters COD, TSS, total nitrogen, total phosphorus, AOX per air-dry tonne of pulp (g/ADT) Conduct Root Cause Analysis (RCA) and a Corrective Action Plan (CAP) for any non-conformities detected. Report the major sludge disposal pathway used. 	Upload test report (twice a year, based on April and October cycles), RCA-CAP details and sludge disposal pathway declaration onto the ZDHC Supplier Platform.
Kraft/Sulphite processes	Load-based air emissions Calculate and report load-based air emissions for total suspended particles/dust, SO ₂ as S, NO _x as NO ₂ , TRS as S as a yearly average of the calendar year (from 1 st January to 31 st December).	Upload comprehensive record/test report of load based and ambient air emission parameters on ZDHC Supplier Platform for calendar year (from 1 st January to 31 st December).
Kraft/Sulphite processes	Ambient air emission Monitor, test and report ambient air emissions of SO ₂ , NO ₂ , PM _{2.5} , PM ₁₀ as a yearly average of the calendar year (from 1 st January to 31 st December).	

Industry Standard Implementation Approach – Brands

